

Amendments to the Claims:

1. (Currently Amended): ~~Nucleic~~ A nucleic acid encoding ~~[[a]] the~~ 26 kD *Lawsonia intracellularis* protein of claim 6, or a part of said nucleic acid that encodes an immunogenic fragment of said protein, ~~; said nucleic acid or said part thereof having at least 90 %, preferably 92 %, more preferably 94 %, even more preferably 96 % homology with a nucleic acid having a sequence as depicted in SEQ ID NO: 1~~
2. (Currently Amended): A DNA fragment comprising a nucleic acid according to claim 1.
3. (Currently Amended): ~~Recombinant~~ A Recombinant DNA molecule comprising a nucleic acid according to claim 1 ~~or a DNA fragment according to claim 2~~, under the control of a functionally linked promoter.
4. (Currently Amended): ~~Live~~ A live recombinant carrier comprising a nucleic acid according to claim 1, ~~a DNA fragment according to claim 2 or a recombinant DNA molecule according to claim 3~~.
5. (Currently Amended): ~~Host~~ A host cell comprising a nucleic acid according to claim 1, ~~a DNA fragment according to claim 2, a recombinant DNA molecule according to claim 3 or a live recombinant carrier according to claim 4~~.
6. (Currently Amended): A 26 kD *Lawsonia intracellularis* protein, said protein comprising an amino acid sequence ~~that is at least 90 %, preferably 92 %, more preferably 94 %, even more preferably 96 % homologous to the amino acid sequence as depicted in SEQ ID NO: 2,~~ or an immunogenic fragment of said protein.

Claims 7 – 8 (Canceled).

9. (Currently Amended): ~~Vaccine~~ A vaccine for combating *Lawsonia intracellularis* infections, ~~characterised in that it comprises~~ infection, comprising a nucleic acid according to claim 1, ~~a DNA fragment according to claim 2, a recombinant DNA molecule according to claim 3, a live recombinant carrier according to claim 4, a host cell according to claim 5 or a protein according to claim 6,~~ and a pharmaceutically acceptable carrier.

10. (Currently Amended): ~~Vaccine~~ The vaccine according to claim 9, ~~characterised in that it comprises~~ comprising an adjuvant.

11. (Currently Amended): ~~Vaccine~~ A vaccine according to claim 9 ~~or 10, characterised in that it comprises~~ ,comprising an additional antigen derived from a virus or micro-organism pathogenic to pigs or genetic information encoding said antigen.

12. (Currently Amended): ~~Vaccine~~ The vaccine according to claim 11, ~~characterised in that~~ wherein said virus or micro-organism pathogenic to pigs is selected from the group of Pseudorabies virus, Porcine influenza virus, Porcine parvo virus, Transmissible gastro-enteritis virus, Rotavirus, *Escherichia coli*, *Erysipelothrix rhusiopathiae*, *Bordetella bronchiseptica*, *Salmonella choleraesuis*, *Haemophilus parasuis*, *Pasteurella multocida*, *Streptococcus suis*, *Mycoplasma hyopneumoniae*, *Brachyspira hyodysenteriae* and *Actinobacillus pleuropneumoniae*.

13. (Currently Amended): ~~Vaccine~~ A vaccine for combating *Lawsonia intracellularis* infections, ~~characterised in that it comprises~~ comprising antibodies against a protein according to claim 6.

Claim 14 (Canceled).

15. (Currently Amended): ~~Diagnostic~~ A diagnostic test method for the detection of antibodies against *Lawsonia intracellularis*[[,]] in a specimen, characterised in that said test comprises comprising contacting protein or a fragment thereof as defined in claim 6[[.]] with the specimen and detecting antibodies bound to the protein.

16. (Currently Amended): ~~Diagnostic~~ A diagnostic test method for the detection of antigenic material of *Lawsonia intracellularis*[[,]]in a specimen, characterised in that said test comprises comprising contacting antibodies against a protein or a fragment thereof as defined in claim 6[[.]] with the specimen and detecting antigenic material bound to the antibodies.

17. (New): The nucleic acid of claim 1, comprising the sequence of SEQ ID NO.1.

18. (New): An isolated protein having an amino acid sequence at least 90% homologous to the protein of claim 6 and having the same antiserum immunoreactivity thereof.

19. (New): A vaccine for combating *Lawsonia intracellularis* infection, comprising a protein according to claim 6.